Dear Sir/Madam,

Reading the conversations on site Whirlpool in the Energy section, there is a heading titled: "Economics of climate change" and a few interesting details have emerged and are listed here in point form:

1 The LCOEs by 2030 are still not calculated in Gencosts for all the VRE funds expended before 2030 and come to about $313billion in my calculations. Surely such a large sum cannot be ignored?
2 Grid length in the next decade has been suggested in the ISP to be 5,000km in the next decade. Has the cost of those 3,000km by 2030 been included in LCOE calculations and if so, what is the cost of one km? Hume Link has been costed out at $5bn for 360km for a 500kV line, what sort of an average figure/km is suggested as they are not all 500kV?
3 Have compensations for the new grid been added into the cost of the grid as $25,000/km has been suggested for one state?
4 Gas firming at 16GW by 2030 has been suggested to reduce battery storage requirements and has this cost of gas firming been included in LCOE calculations?
5 Stored hydro is about 1.6GW existing at Wivenhoe, Tumut 3 and Shoalhaven plus 2GW at Snowy 2.0 plus 2GW at Borumba or about 6GW in total. SH2 cost $12bn for 2GW far and Borumba has been costed at $14bn, using $6bn/GW is it correct to say $36bn will need to be allocated for stored hydro by 2030?
6 How many GW of coal will still need to be retired by 2030 to be 82% VRE by 2030?
7 As the gov. has mandated 82% VRE by 2030, is it possible to work towards this percentage rather than other percentages?

8 Total storage by 2030 has been estimated in ISP to be 19GW, 19GW - ~6GW stored hydro leaves 13GW for batteries. Is $3bn/GW for LS 8-hour batteries then a reasonable present figure to use to work out funds expended by 2030 for batteries?
9 40GW of wind energy has been suggested, would $1bn/GW be a correct figure using the MacIntyre onshore wind farm as reference to come to $40bn by 2030?
10 Rooftop PV will be 36GW in 2030, my 6.6kW 3-phase Fronius system cost $8650 excluding $2,700 STCs, so 36,000,000kW / 6.6kW x $8,650 = $47bn in private and gov. costs will be spent by 2030. Should this cost be included into the LCOE calculation for a VRE system?
11 Total federal and state subsidies spent so far have been estimated at $60bn. Do you have a better figure to add to the total cost of the VRE cost by 2030?

Kind regards
Dominic Wild
Bentley, WA